WHAT IS CLAIMED IS

1. A method of modulating an immune response comprising the step of administering a compound to an animal to decrease myeloid cell activation, wherein said decrease comprises decreasing the activity of DAP12/TREM-1 complex.

2. The method of claim 1, wherein said compound is a competitive inhibitor of the ligand to TREM-1.

3. The method of claim 2, wherein said competitive inhibitor is a polypeptide comprising the amino acid sequence of SEQ.ID.NO:2.

4. The method of claim 3, wherein said inhibitor is a functional equivalent of the amino acid sequence of SEQ.ID.NO:2.

5. The method of claim 1, wherein said immune response is an inflammatory response.

6. The method of claim 1, wherein said compound increases the levels of TREM-1sv.

7. A method of decreasing myeloid cell activation comprising the step of administering to an animal a compound to decrease the activity of DAP12/TREM-1 complex.

8. The method of claim 7, wherein said compound is a competitive inhibitor of the ligand for TREM-1.

9. The method of claim 8, wherein said competitive inhibitor is a polypeptide comprising an amino acid sequence of SEQ.ID.NO:2.

10. The method of claim 8, wherein said competitive inhibitor is a functional equivalent of the polypeptide comprising an amino acid sequence of SEQ.ID.NO:2.

11. The method of claim 8, wherein said competitive inhibitor is admixed with a pharmaceutical carrier.

12. A method of modulating an inflammatory response in a subject suffering from a disease or condition, wherein the disease or condition results in inflammation comprising the step of altering the activity of the DAP12/TREM-1 complex.

13. The method of claim 12, wherein altering comprises modulating the binding of a ligand to TREM-1.

14. The method of claim 13, wherein modulating the binding comprises administering a competitive inhibitor for the ligand of TREM-1, wherein the competitive inhibitor is a polypeptide comprising SEQ.ID.NO:2 or a functional equivalent thereof.

15. The method of claim 12, wherein the disease or condition is selected from the group consisting of organ transplant/rejection, bone marrow transplant/rejection, graft versus host disease, infectious disease, autoimmune diseases.

16. The method of claim 15, wherein the infectious disease is septic arthritis or septic shock.

17. The method of claim 13, wherein modulating the binding comprises administering a compound that increases the levels of TREM-1sv, wherein TREM-1sv is a competitive inhibitor for the ligand of TREM-1.

18. A method of treating inflammation comprising the step of administering a compound comprising a pharmaceutical carrier admixed with a polypeptide of SEQ.ID.NO:2 or a functional equivalent thereof.

19. A method of treating an autoimmune disorder comprising modulating the inflammatory response, wherein modulating comprises administering a compound comprising a polypeptide having the amino acid sequence of SEQ.ID.NO:2 or a functional equivalent thereof.

20. The method of claim 19, wherein said autoimmune disorder is selected from the group consisting of rheumatoid arthritis, lupus and schleroderma.

21. The method of claim 19, wherein said polypeptide modulates the activity of DAP12/TREM-1 complex.

22. A method of modulating tissue healing/repair comprising the step of decreasing the inflammatory response, wherein decreasing comprises administering a compound comprising a polypeptide having the amino acid sequence of SEQ.ID.NO:2 or a functional equivalent thereof.

23. A method of modulating myeloid cell-mediated tumor immunotherapy comprising the step of administering to an animal a compound to decrease the levels of TREM-1 splice variant.

24. The method of claim 32, wherein the compound is an antibody that binds immunologically to TREM-1 splice variant.

25. The method of claim 32, wherein the compound is an antisense molecule of TREM-1 splice variant.

26. A method of diagnosing an inflammatory response in a subject comprising the steps of:

collecting a tissue sample from the subject;

isolating monocytes from the sample; and

measuring the levels of TREM-1 protein in the monocytes, wherein an increase in the levels of TREM-1 indicates an inflammatory response.

27. The method of claim 26 further comprising isolating macrophages from the tissue sample and measuring the levels of TREM-1 protein in the macrophages.

28. The method of claim 26 further comprising isolating neutrophils from the tissue sample and measuring the levels of TREM-1 protein in the neutrophils.

29. The method of claim 26, wherein the tissue sample is bone marrow.

30. The method of claim 26, wherein the inflammatory response is a result of an autoimmune disease.

31. A method of diagnosing an inflammatory response in a subject comprising the steps of:

collecting a blood sample from the subject; and

measuring the levels of TREM-1 splice variant protein in the sample, wherein an decrease in the levels of TREM-1 splice variant indicates an inflammatory response.

32. A method of diagnosing an inflammatory response in a subject comprising the steps of:

collecting blood and tissue samples from the subject;

isolating monocytes and neutrophils from the tissue sample;

measuring the levels of TREM-1 protein in the monocytes and neutrophils; and

measuring the levels of TREM-1 splice variant in the blood sample, wherein an increase in the levels of TREM-1 protein and a decrease in the levels of TREM-1 splice variant indicates an inflammatory response.

33. The method of claim 32 further comprising isolating macrophages from the tissue sample.

34. The method of claim 32, wherein the inflammatory response is a result of an autoimmune disease.

35. A method of modulating cellular activation and phagocytic activity in a subject suffering from histiocytosis comprising the step of administering to the subject a compound to decrease the activity of DAP12/TREM-1 complex.

36. The method of claim 35, wherein said compound is a competitive inhibitor of the ligand for TREM-1.

37. The method of claim 36, wherein said competitive inhibitor is a polypeptide comprising an amino acid sequence of SEQ.ID.NO:2.

38. The method of claim 36, wherein said competitive inhibitor is a functional equivalent of the polypeptide comprising an amino acid sequence of SEQ.ID.NO:2.